

Appl. No. : 10/695,269  
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IN THE CLAIMS:

1-36. (Canceled)

37. (Currently amended) A reactant source assembly for generating a gas phase reactant flow, comprising:

a first container having an opening and containing liquid or solid reactant matter;

a lid configured to cover the opening of said first container, said lid being positioned above the liquid or solid reactant matter such that a vapor space is defined between the liquid or solid reactant matter and the lid;

a second container having a gas tight container wall separate from the lid, the gas tight container wall enclosing the first container and defining a gas space around the first container and above the lid;

at least one inlet in the gas tight container wall of the second container for feeding gas into the gas space; and

at least one outlet in the gas tight container wall of the second container for withdrawing reactant vaporized from the first container and collected in the gas space;

at least one inlet conduit extending through the at least one inlet and comprising an inlet opening;

at least one outlet conduit extending through the at least one outlet and comprising an outlet opening;

wherein the opening of the first container opens into the gas space enclosed by the second container and around the first container, the lid comprises a mechanical filter to remove impurities from gas vaporized from the liquid or solid matter contained therein and wherein the inlet opening of the at least one inlet conduit is positioned below the outlet opening of the at least one outlet conduit.

38. (Previously presented) The reactant source assembly according to Claim 37, comprising further at least one valve for controlling gas flow through the at least one inlet into the gas space and at least one valve for controlling gas flow through the at least one outlet from the gas space.

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39. **(Currently amended)** The assembly according to Claim 37, wherein the container wall of the second container is made of a metal selected from the group consisting of stainless steel, titanium and aluminum.

40. **(Original)** The assembly according to Claims 37, wherein the first container is made from glass.

41. **(Original)** The assembly according to Claim 37, wherein the first container is made from metal, graphite or ceramic materials, said container having a non-reactive surface layer.

42. **(Canceled)**

43. **(Previously presented)** The assembly according to Claim 37, further comprising a reaction chamber that is connected to the at least one outlet for receiving reactant vaporized from the first container and collected in the gas space.

44. **(Previously presented)** The assembly according to Claim 37, wherein the gas space around the first container and enclosed by the second container is sized to collect vaporized reactant that is to be delivered to a reaction chamber.

45. **(Previously presented)** The assembly according to Claim 37, wherein the lid comprises a ceramic sinter.